

Response Under 37 CFR §1.116

Expedited Procedure

Examining Group 3722

Application No. 10/733,166

Paper Dated August 12, 2005

In Reply to USPTO Correspondence of June 3, 2005

Attorney Docket No. 0687-032374

On page 2 of the Office Action the Examiner rejects claims 1-4, 7-9 and 19-21 under 35 U.S.C. §102(b) as being anticipated by the teaching of United States Patent No. 4,001,925 to Eriksson. The Examiner provides no reasons for this rejection.

Independent claim 1 is directed to a toolholder with a lever pivotally mounted upon a pivot **fulcrum** on the body and adapted to hold the cutting insert within the pocket. The lever has a first end adjacent to the pocket for contacting the cutting insert and a second end opposite thereto. The pivot fulcrum is substantially closer to the first end than to the second end to provide mechanical advantage. Such an arrangement is illustrated in Figures 2A and 2B of the present application. A fulcrum is the support upon which a lever pivots. In Figures 2A and 2B of the present application, the pivot fulcrum is indicated by reference number 45. Through this arrangement, a small force applied to the second end of the lever translates into a larger force at the first end of the lever against the insert 30.

On the other hand, the Eriksson patent is directed to a cutting tool having a clamp 14 with a beveled hole 31 extending therethrough. The hole 31 is engaged by a screw 18 to laterally displace the clamp 14 such that the rounded tongue 19 of the clamp 14 pivots within a hollow 20 in the holder 10. This motion causes a projection 21 of the clamp 14 to act downwardly against an insert 13, thereby securing the insert 13 within the holder. The pivot fulcrum is the hollow 20 in the holder 10.

In particular, in the Eriksson patent the fulcrum is defined by the rounded tongue 19 resting within the hollow 20 in the holder 10. The pivot pin 18 is not a fulcrum. As discussed in column 3, lines 52-57 of the Eriksson patent, it is essential that the screw 18 and the hole 27

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be formed so that the downward and lateral movements of the clamp 14 will result in forcing the insert 13 against its bottom support as well as the clamp 14 against its lateral support. Restated, the screw 18 applies a force against the clamp 14. The clamp 14 pivots about the fulcrum, which is in the hollow 20 of the toolholder 10, to apply a force against the insert 13. Therefore, applying the language of claim 1 of the subject application, the second end of the lever (the rounded tongue 20) is the fulcrum and, therefore, the pivot fulcrum is not substantially closer to the first end of the lever than to the second end of the lever. The second end of the clamp in the Ericksson patent generally coincides with the fulcrum. The force to activate and to displace the clamp 14 is provided by the screw 18. For that reason, the exact opposite arrangement is found in the Ericksson patent. The pivot fulcrum is substantially closer to the second end of the clamp 14 and a force applied at the second end will not secure the insert within the holder. For these reasons, the Applicants do not believe that claim 1 of the present application is anticipated or made obvious by the teaching of the Eriksson patent and is therefore believed to be patentably distinct over the teaching of the Eriksson patent. By way of their dependence upon what is believed to be patentably distinct claim 1, dependent claims 2-4 and 7-9 are themselves believed to be patentably distinct.

For the same reasons set forth with respect to independent claim 1, independent claim 19 is also believed to be patentably distinct over the teaching of the Eriksson patent. Claims 20 and 21, by way of their dependence upon independent claim 19, are themselves believed to be patentably distinct.

On page 3 of the Office Action, the Examiner rejects claims 1-4, 7-10-13, 14 and

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19-21 under 35 U.S.C. §103 (a) as being obvious from the teaching of the Eriksson patent. The Examiner indicates the Eriksson patent discloses all of the features of the subject invention with the exception that the Eriksson patent does not disclose a pivot pin (fulcrum) located closer to a first end of the lever but that such a feature would be obvious to one having ordinary skill in the art. The Applicants respectfully disagree. As previously discussed, the clamp 14 in the Eriksson patent operates in a significantly different manner than the lever 40 of the Applicants' invention. In accordance with the Applicants' invention, with a pivot fulcrum substantially closer to the first end than to the second end of the lever, a small force upon the second end will translate into a larger force against the first end and therefore against the insert 30. On the other hand, to the extent that the rounded tongue 19 is the second end of the clamp 14, this is also the fulcrum and it is impossible then for the pivot fulcrum to be substantially closer to the first end than to the second end and it is also impossible to apply a force to the second end of the clamp 14 to produce a force that will retain the insert 13 within the holder. For that reason, the Applicants do not believe that claim 1 is made obvious by the teaching of the Eriksson patent and is therefore patentably distinct over the teaching of the Eriksson patent. By way of their dependence upon what is believed to be patentably distinct independent claim 1, dependent claims 2-3, 13 and 14 are themselves believed to be patentably distinct.

For the same reasons claim 1 is believed to be patentably distinct over the teaching of the Eriksson patent, so too is independent claim 19 and based upon their dependence upon what is believed to be patentably distinct independent claim 19, dependent claims 20 and 21 are themselves believed to be patentably distinct over the prior art of record.

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The Examiner on page 3 of the Office Action has indicated that claims 16-18 are rejected under 35 U.S.C. § 103 (a) as being anticipated by the teaching of United States Patent No. 5,921,719 to Laflamme. The language of this rejection is inconsistent. However, it appears this is an obviousness type rejection and not anticipatory.

The Laflamme patent is directed to an insert holder with a top clamp 46 wherein, as illustrated in Figure 6, the clamp 46 has a clamp screw hole 49, a pivot 50 and an end surface 59. A clamp screw 48 extends through the clamp screw hole 49, thereby causing the clamp 46 to pivot about the pivot 50 so that the contact surface 55 with the clamp 46 acts against the top surface of a cutting insert 42 to secure the cutting insert 42 within a pocket. In essence, pivot 50 is the fulcrum. To the extent that the clamp 46 is a lever, the first end of the clamp 46 is intended to contact the cutting insert 42 and the second end of the clamp 46 is opposite thereto, then, just as in the teaching of the Eriksson patent, the pivot 50 (fulcrum) overlaps the second end of the lever and the pivot fulcrum is not substantially closer to the first end than to the second end of the lever. Just the opposite is true. The pivot fulcrum is closer to the second end than to the first end. Therefore, for these and the other reasons previously discussed with respect to the Eriksson patent, independent claim 16 is neither believed to be anticipated nor made obvious by the teaching of the Laflamme patent. By way of their dependence upon what is believed to be patentably distinct independent claim 16, dependent claims 17 and 18 are themselves believed to be patentably distinct.

The Examiner on page 4 of the Office Action, rejects claim 15 under 35 U.S.C. §103(a) as being obvious from the Eriksson patent in view of the further teaching of United

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States Patent No. 4, 309,132 to Adamson, et al. By way of its dependence upon what is believed to be patentably distinct independent claim 1, claim 15 is itself believed to be patentably distinct over the prior art of record.

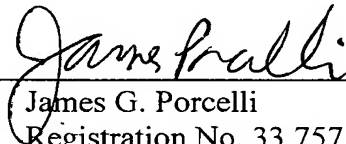
The Examiner has indicated that claims 5, 6, 11 and 12 would be allowable if rewritten in independent format including all of the limitations of the base claim and any intervening claims. The Applicants agree with this evaluation however, believes that all of the currently pending claims are allowable.

Reconsideration and allowance of pending claims 1-21 are respectfully requested.

Respectfully submitted,

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